

**REMARKS****Amendment to the Specification**

The related applications paragraph has been updated to reflect that several of the applications to which priority is claimed have issued as patents. No new matter has been added.

**Claim Amendments**

Claims 172-189, 191, 192, 194, 203-207 and 209-212 have been amended.

Claims 172-185 and 191 have been amended to recite “polypeptides” instead of “groups of polypeptides”.

Claims 175, 176, 183 and 184 have been amended to recite that the polypeptides are “bound to” positionally defined locations, in order to be consistent with Claims 173, 174, 181 and 182.

Claim 185 has been amended to use the term “polypeptides” throughout.

Claims 186-188 have been amended to further clarify that the claim encompasses the areas recited in the claim.

The preambles of Claims 187 and 188 have been amended to recite “array” instead of “method”.

Claim 189 has been amended to recite that 1,000 different polypeptides are formed in step (d).

Claims 203 and 204 have been amended to use language consistent with Claim 205.

Claim 207 has been amended to depend from Claim 193. Claim 207 has also been amended to recite “a third portion” rather than “at least a third portion”. It is understood that a third portion is not a fixed quantity (it must include at least a fraction of the first portion and be no larger than the solid support), thus the recitation of “at least” is unnecessary and this amendment does not change the scope of the claim.

Claim 209 has been amended to recite “substrate”, which finds antecedent basis in Claim 192.

Claim 212 has been amended to consistently use the term “polypeptides”.

The claims generally have been amended to correct typographical and grammatical errors, as well as to use consistent language throughout the claim set.

No new matter has been added.

#### Objection to Abstract

The abstract is objected to because the abstract is alleged not to be applicable to the currently claimed invention.

According to MPEP § 608.01(b), the abstract is “a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains”. The present abstract reflects the technical disclosure of the patent as a whole. There is no requirement under MPEP § 608.01(b) that the abstract be directed to the claimed invention. Thus, the present abstract fully complies with MPEP § 608.01(b). Reconsideration and withdrawal of the objection are respectfully requested.

#### Rejection of Claims 172-212 Under 35 U.S.C. § 112, Second Paragraph

Claims 172-212 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The Examiner states that Claims 172 and 180 have insufficient antecedent basis for the recitation “said groups of polypeptides” in the claims. Claims 172 and 180 have been amended to recite “said polypeptides”, which finds antecedent basis in the claims. The meaning of the claim is not altered by this amendment.

The Examiner states that it is not clear that an array of at least 1,000 different groups of polypeptides are formed in Claim 189. The final method of step of Claim 189 has been amended to further clarify that an array of at least 1,000 different groups of polypeptides are formed.

The Examiner states that there is insufficient antecedent basis for the recitation “said solid support” in Claim 210. Claim 210 has been amended to recite “said planar rigid support,” which finds antecedent basis in the second line of the claim.

In view of the above amendments, it is believed that all aspects of the rejection have been obviated. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 172-212 Under Obviousness-Type Double Patenting

*U.S. Patent Nos. 6,416,952 and 6,506,558*

Claims 172-212 have been rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-44 of U.S. Patent No. 6,416,952 and Claims 1-9 of U.S. Patent No. 6,506,558. Applicants supply herewith a Terminal Disclaimer, in which the owner of 100 percent interest in the instant application, Affymetrix, Inc., disclaims, except as provided therein, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173, as presently shortened by any terminal disclaimer, of prior Patent Nos. 5,405,783; 6,346,413; **6,416,952**; **6,506,558**; and 6,610,482.

*U.S. Patent Nos. 5,384,261 and 5,677,195*

Claims 172-212 have also been rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-14 of U.S. Patent No. 5,384,261 (hereinafter “the ‘261 Patent”) and Claims 1-36 of U.S. Patent No. 5,677,195 (hereinafter “the ‘195 Patent”).

The cited claims of the ‘261 Patent are directed to methods of forming a plurality of peptide sequences on a surface of a single substrate. The cited claims of the ‘195 are directed to methods of forming oligonucleotides or peptides having diverse sequences on a single substrate. In contrast, Claims 172-212 are directed to a variety of substrates or supports with a surface comprising a plurality of polypeptides bound to the surface. Applicants respectfully submit that the instantly claimed compositions are a different invention from and are not rendered obvious by the methods claimed in the ‘261 and ‘195 Patents. Moreover, even Claims 189 and 207, which recite the method steps by which the claimed composition is made, clearly recite that the array is produced without physical segregation of the substrate. Methods of preparing an array using physical segregation of the substrate do not render obvious an array prepared without physical segregation of the substrate. As such, the instant composition claims are patentable over the claims of the ‘261 and ‘195 Patents. Reconsideration and withdrawal of the rejection are respectfully requested. If the Examiner maintains this rejection, clarification of the basis of the rejection is respectfully requested, and the undersigned would be pleased to participate in a telephonic interview in this regard.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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Dated:

12/4/03